WHAT IS CLAIMED IS:

1. A light beam scanning device, comprising:

a light source provided with a microarea light-emitting diode having microarea light-emitting regions;

a modulator for generating a pulse signal including at least one pulse having a period shorter than a period for forming an image corresponding to one pixel on the basis of image data, and modulating light beams emitted from the microarea light-emitting diode with the pulse signal; and

a scanner for scanning a photosensitive material with the modulated light beams.

2. The scanning device according to claim 1, wherein the period of the pulse is less than one tenth of the period for forming an image corresponding to one pixel.

3. The scanning device according to claim 1, wherein an image corresponding to one pixel is formed by repeating scanning with the light beams modulated by the pulse signal in a main-scanning direction, several times in a sub-scanning direction.

4. The scanning device according to claim 1, wherein an image corresponding to one pixel is formed by being exposed several times respectively in a main-scanning direction and in a sub-scanning direction.

5. The scanning device according to claim 1, wherein a number of pulses for forming an image corresponding to one pixel is determined on the basis of tone information obtained from the image data.

6. The scanning device according to claim 1, wherein the light source includes a microarea light-emitting diode emitting a light beam in a wavelength range corresponding to blue, a microarea light-emitting diode emitting a light beam in a wavelength range corresponding to green, and a microarea light-emitting diode emitting a light beam in a wavelength range corresponding to red.

7. A scanning device, comprising:

a light source provided with a microarea light-emitting diode having microarea light-emitting regions;

a modulator for determining a number of pulses having a constant period and a substantially constant power within a period for forming an image corresponding to one pixel on the basis of image data, and modulating light beams emitted from the microarea light-emitting diode with a pulse signal including the pulses; and

a scanner for scanning a photosensitive material with the modulated light beams.

8. The scanning device according to claim 7, wherein the period of the pulse is less than one tenth of the period for forming an image corresponding to one pixel.

9. The scanning device according to claim 7, wherein an image corresponding to one pixel is formed by repeating scanning with the light beams modulated by the pulse signal in a main-scanning direction, several times in a sub-scanning direction.

10. The scanning device according to claim 7, wherein an image corresponding to one pixel is formed by exposing several times respectively in a main-scanning direction and in a sub-scanning direction.

11. The scanning device according to claim 7, wherein a number of the pulses for forming an image corresponding to one pixel is determined on the basis of tone information obtained from the image data.

12. The scanning device according to claim 7, wherein the light source includes a microarea light-emitting diode emitting a light beam in a wavelength range corresponding to blue, a microarea light-emitting diode emitting a light beam in a wavelength range corresponding to green, and a microarea light-emitting diode emitting a light beam in a wavelength range corresponding to red.